



STS CONSULTANTS

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October 15, 2003

Mr. Fred Micke, On-Scene Coordinator
US Environmental Protection Agency - Region 5
77 W. Jackson Blvd., SE-5J
Chicago, Illinois 60604-3590

EPA Region 5 Records Ctr.



236013

RE: Monthly Progress Report for September 2003, 221 N. Columbus Drive, Chicago, Illinois - STS
Project No. 1-32193-XC

Dear Mr. Micke:

In accordance with the Work Plan¹ STS Consultants, Ltd. (STS) is providing a monthly progress report that identifies the actions taken in September 2003 and activities planned for October 2003.

PROGRESS DURING SEPTEMBER 2003

1. The periodic surveying of infrastructure installation activities (i.e., caissons, utility installations, etc.) for radiologically-impacted soil continues. During the week of September 29, 2003, survey activities were conducted at caisson locations within the former northern slip area. No evidence of elevated gamma readings was observed.
2. A surface survey was conducted in front of the former golf course tee-box area where ponded water prevented the gathering of data during the original 2001 surveys. No evidence of elevated gamma readings was observed. This information will be forwarded to the USEPA in an Addendum to the Completion Report. Per the request of the USEPA, a surface survey also will be conducted of the sediment following the draining of the pond located in the northwest corner of the site. However, at this time a date for the pond draining has not been scheduled.
3. No personal or area air monitoring was conducted during September since there was no excavation or handling of radiologically-impacted soil. When the monthly report for August was submitted, the results for the August 25 air monitoring had been analyzed and indicated no exceedances, but were not tabulated for submission. Thus, the results for the August 25 monitoring have been included within Attachment 1.
4. The completion report (dated September 19, 2003) was submitted to the USEPA for review and comment.

PLANNED ACTIVITIES FOR OCTOBER 2003

1. Gamma surveys will be conducted for infrastructure installation activities (i.e., caissons) within the former northern slip area. The USEPA will be notified upon discovery of any radiologically-impacted materials. Excavation activities will take place as necessary to remediate radiologically-impacted soil. The USEPA will be requested to conduct verification surveys and sign-off that the areas have been successfully remediated.
2. Monthly reports will be submitted to the USEPA until approval of the closure report.

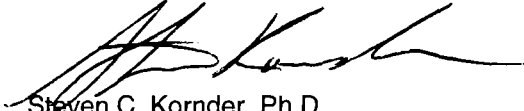
¹ STS (revised September 30, 2002) Work Plan for Investigation and Removal of Radiologically Impacted Soil, Lakeshore East LLC, 221 N. Columbus Drive, Chicago, Illinois.

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Please contact us at 847-279-2500 with any questions regarding this report.

Regards,

STS CONSULTANTS, LTD.

A handwritten signature in black ink, appearing to read 'S. Kornder', is written over the printed name.

Steven C. Kornder, Ph.D.
Senior Project Geochemist

Attachments

cc: Kara Hughes, Lakeshore East, LLC
Sean Bezark, Altheimer & Gray
Barbara Magel, Karaganis, White & Magel
Mark Krippel, Kerr-McGee Chemical LLC

ATTACHMENT 1

Air Monitoring

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Lakeshore East Project - 221 North Columbus Drive, Chicago, IL

North Monitor

Report #32 8/25/03 - 8/29/03

(High Volume)

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/25/03	281	2.05E-15	5.76E-13	Monday 8/25/03 was only day this week that excavation and loading was performed
8/26/03	0	0.00E+00	0.00E+00	
8/27/03	0	0.00E+00	0.00E+00	
8/28/03	0	0.00E+00	0.00E+00	
8/29/03	0	0.00E+00	0.00E+00	
	281	2.05E-15	5.76E-13	

$$C_{avg} = \frac{\sum T_s \cdot C_i}{\sum T_s}$$

Eq A.9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (North) = 2.05E-15 uCi/ml

Percentage of Release Limit of = 51.25%
4E-15uCi/ml

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/25/03	279	0.00E+00	0.00E+00	
8/26/03	0	0.00E+00	0.00E+00	
8/27/03	0	0.00E+00	0.00E+00	
8/28/03	0	0.00E+00	0.00E+00	
8/29/03	0	0.00E+00	0.00E+00	
	279	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\sum T_s \cdot C_i}{\sum T_s}$$

Eq A.9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%
4E-15uCi/ml

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/25/03	278	0.00E+00	0.00E+00	
8/26/03	0	0.00E+00	0.00E+00	
8/27/03	0	0.00E+00	0.00E+00	
8/28/03	0	0.00E+00	0.00E+00	
8/29/03	0	0.00E+00	0.00E+00	
	278	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\sum T_s \cdot C_i}{\sum T_s}$$

Eq A.9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%
4E-15uCi/ml

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/25/03	279	0.00E+00	0.00E+00	
8/26/03	0	0.00E+00	0.00E+00	
8/27/03	0	0.00E+00	0.00E+00	
8/28/03	0	0.00E+00	0.00E+00	
8/29/03	0	0.00E+00	0.00E+00	
279		0.00E+00	0.00E+00	

$$C_{avg} = \frac{\sum T_s \cdot C_i}{\sum T_s}$$

$$\sum T_s$$

Eq A.9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Lakeshore East Project - 221 North Columbus Drive, Chicago, IL

Report No. 32

August 25, 2003 - August 29, 2003

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit 4.00E-15 uCi/ml
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	
N2062	8/25/03	8:41am	1:22pm	281	42	1.17E+07	8/26/03	113	13	3.33333	1.03E-13	8/29/03	13	11	0.067	2.05E-15	51.37%
S2062	8/25/03	8:45am	1:24pm	279	41	1.13E+07	8/26/03	84	13	2.36667	7.53E-14	8/29/03	10	11	0	0.00E+00	0.00%
E2062	8/25/03	8:43am	1:21pm	278	39	1.07E+07	8/26/03	139	13	4.2	1.41E-13	8/29/03	11	11	0	0.00E+00	0.00%
W2062	8/25/03	8:47am	1:26pm	279	40	1.11E+07	8/26/03	107	13	3.13333	1.02E-13	8/29/03	9	11	0	0.00E+00	0.00%
Monday August 25, 2003 was the only day during this week when thorium contaminated material was excavated and loaded. Air Monitoring not required on other work days.																	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Report No. 32 August 25 - August 29, 2003

Lakeshore East Project - 221 North Columbus Drive, Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)
8/25/03	Glenn Huber	PAM2259	006-234	2.5	385	962500	8/26/03	22	13	0.30	7.87E-14*
8/25/03	Odell Morgan	PAM2260	002-574	2.5	385	962500	8/26/03	18	13	0.17	4.37E-14*
<p>Monday August 25, 2003 was the only day during this week when thorium contaminated material was excavated and loaded. Air Monitoring not required on other work days.</p>											

Note: Official airborne Th-232 concentrations are obtained from 4 Day Analysis.
See attached 4 Day Analysis Form for Occupational Dose Limit Information.

Personal Air Monitoring Summary Sheet (PAM's -4 Day Analysis)

Report No. 32 August 25 - August 29, 2003

Lakeshore East Project - 221 North Columbus Drive, Chicago, IL

***Note: All samples on this page were analyzed after 4 days to allow for thorium daughter decay

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	% of DAC
8/25/03	Glenn Huber	PAM2259	006-234	2.5	385	962500	8/29/03	11	11	0.00	0.00E+00	0.00%
8/25/03	Odell Morgan	PAM2260	002-574	2.5	385	962500	8/29/03	9	11	0.00	0.00E+00	0.00%

Occupational Dose Limit for Occupational Radiation Exposure = 5 rem Total Effective Dose Equivalent

2000 DAC-Hours = 5 rem

DAC (Derived Air Concentration) for Th-232 = $5E-13$ uCi/ml

Administrative Site Limit for Occupational Exposure = 30% Th-232 DAC = $1.5E-13$ uCi/ml